# **PUBLIC WORKS** PUBLIC WORKS



The Public Works Department comprises seven separate divisions to maintain the Town infrastructure.

The Divisions are:

- Administration
- Engineering
- Cemeteries
- Natural Resources (Parks and Trees)
- Highway
- Motor Equipment Repair
- Water and Sewer Utilities

The Department is responsible for 100 miles of public roadways, 250 miles of water and sewer pipes, 75 miles of storm drains including 3,500 catch basins, numerous parks, playgrounds, athletic fields and open lands, and approximately 19,000 public trees. In addition, the Department maintains over 150 Town vehicles and operates three service utilities: Water, Sewer and Solid Waste.

### **Budget Statement**

This is a level services budget.

Other budget changes are described in each division's section.

PROGRAM COSTS					
Public Works	FY2021	FY2022	FY2023	FY2024	
Department	Actual	Actual	Budget	Request	
Personnel Services	3,659,614	3,647,945	4,588,595	4,708,377	
Expenses	6,287,386	6,571,539	7,424,825	7,597,586	
Total	9,947,000	10,219,484	12,013,420	12,305,963	

STAFFING						
	FY2021	FY2022	FY2023	FY2024		
Public Works	Actual	Actual	Budget	Request		
Managerial	7	7	7	7		
Clerical	4	4	4	4		
Professional/Technical	5.7	5.36	6.57	6.57		
Public Works	45.00	45.00	45	45		
Total	61.7	61.36	62.57	62.57		



PROGRAM COSTS					
Public Works	FY2021	FY2022	FY2023	FY2024	
Administration	Actual	Actual	Budget	Request	
Personnel Services	442,078	497,269	607,755	623,942	
Expenses	21,411	18,615	20,600	20,600	
Total	463,489	515,884	628,355	644,542	

STAFFING				
Public Works	FY2021	FY2022	FY2023	FY2024
Administration	Actual	Actual	Budget	Request
Managerial	2	2	2	2
Clerical	3	3	3	3
Professional/Technical	1.7	1.36	2.57	2.57
Custodial / Bldg. Maint.	0	0	0	0
Total	6.7	6.36	7.57	7.57

### **FY2024 Objectives**

 Assist in transition of all DPW divisions to new DPW facility at 51 Grove St.

### **Major Accomplishments for 2022**

- Continued oversight of DPW Facility construction.
- Held Reuse & Recycling Center appointments year-round during the week and one weekend a month, serving approximately 3,500 appointments in the year.
- Received annually, since FY16, a MA Department of Environmental Protection (DEP) Sustainable Materials Recovery grant, (\$38,000), called the Recycling Dividend Program, with funding designed to continue to support waste diversion activities.
- Signed contract extension with waste hauler JRM, which is now Republic Services.

### Performance / Workload Indicators FY2020 FY2021 FY2022 FY2023 Actual Actual Actual **Estimated** Administration Purchase Orders processed 1,265 1,000 1,259 1,016 Water/Sewer bills generated 50,420 50,680 50,890 50,680



### The Engineering Division has the following responsibilities:

- Coordination and preparation of technical designs, engineering plans, and specifications for municipal infrastructure improvements and other capital projects.
- Oversight of contracted construction projects, including field inspections and administrative requirements.
- Inspection for construction quality assurance within public properties and roadways, including inspection of trench and property restoration work by private contractors and other utilities.
- Provide recordkeeping and update plans for Town roadways, sidewalks, water/sewer lines, parks, and infrastructure.
- Technical support and construction oversight assistance for the Department of Public Works and other Town Departments, including the Planning and Community Development and Recreation Departments.
- Management of online Street Opening Permit System for issuance of permits.
- Oversight and management of Traffic Signals maintenance contractor.
- Reviewing, preparing reports on, and regulating the impact of private developments on our water/sewer and storm water utilities, roadways, sidewalks, and other Town assets.
- Performing private way improvement cost estimates and assisting the Select Board Office with the betterment process.

### **Budget Statement**

This is a level-services budget.

PROGRAM COSTS						
	FY2021	FY2022	FY2023	FY2024		
Engineering	Actual	Actual	Budget	Request		
Personnel Services	333,385	358,842	368,678	376,066		
Expenses	11,249	87,237	88,500	88,500		
Total	344,634	446,079	457,178	464,566		

STAFFING           FY2021         FY2022         FY2023         FY2024							
Engineering	Actual	Actual	Budget	Request			
Managerial	0	0	0	0			
Clerical	0	0	0	0			
Professional/Technical	4	4	4	4			
Public Works	0	0	0	0			
Total	4	4	4	4			

### FY2024 Objectives

- Perform townwide Pavement Condition Survey for use in prioritizing/ identifying pavement restoration projects. This survey is conducted once every 5 years on average.
- Mystic Street Bridge: Bridge Design for Structural Adequacy has been performed and approved by MassDOT. Additional delays have been encountered due to design updates required by utility companies; National Grid, Eversource and Verizon for the conduit bank and gas mains approaching the bridge. Engineering Division will continue coordination for implementation of the contract bid and award phase followed by coordination for utility relocations.
- Prepare construction specifications and contract documents and coordinate, supervise and monitor annual construction projects including road rehabilitation, water rehabilitation, sewer system updates, curb/walk & ramp improvement projects, traffic signal upgrades, and other miscellaneous projects as needed.
- Provide in-house design services to address identified issues such as traffic calming, road geometry changes, paving and parking improvements and other pertinent items.
- Monitor infrastructure conditions, GIS data and plan improvements to complete annual goals and maintain adherence to the updated EPA MS4 permit. MS4 permits authorize cities, counties, or other governmental entities to discharge storm water collected by their storm drain systems to waters of the United States. Recent permit requirement updates were made to improve the quality of water being discharged to local water bodies.
- Coordinate and monitor annual sewer rehabilitation and capital improvements. Supervise, review, and direct Sewer System Investigation and Planning Program (SSIPP) in coordination with design consultant to ensure compliance with MassDEP goals and objectives.



### Objectives (cont.)

- Assist Town Departments, Boards and Committees, including the Transportation Advisory Committee (TAC), Redevelopment Board (ARB), and Zoning Board of Appeals (ZBA), with site plan review to ensure requirements and Town goals are addressed.
- Perform, coordinate and/or assist the preparation of the following administrative, regulatory and financial requirements:
  - Environmental Protection Agency
    - Municipal Separate Storm Sewer System (MS4) Annual Report.
  - Massachusetts Department of Conservation & Recreation (DCR)
    - Bi-Annual Arlington Reservoir inspection
    - Emergency Action Plan Updates
  - Massachusetts Department of Transportation (MassDOT)
    - Chapter 90 Administration; Funding and Reimbursement
    - Assistance with DOT Grants and Construction including:
    - Safe Routes to Schools Program. (Grant of approximately \$1M awarded to the Town for improvements near the Stratton School).
    - Municipal Small Bridge Program: \$500,000 awarded toward the reconstruction of Mystic Street Bridge over the Mill Brook.
    - Annual Municipal Highway Access Permit
  - Massachusetts Water Resources Authority (MWRA)
    - Annual Municipal Discharge Permit
    - Annual Sanitary Sewer Questionnaire/Survey
    - Emergency Response Plan; updates & training
    - MWRA Loan Assistance; Water & Sewer
  - Massachusetts Department of Environmental Protection (DEP)
    - Annual Statistical Report outlining water use data
    - Sanitary Survey for water distribution system

Road, water and sewer projects are listed at www.arlington.gov/projects.

# Major Accomplishments for 2022

- Performed oversight and monitoring for Town Capital Projects including road rehabilitation, pavement preservation, water rehabilitation, sewer rehabilitation, storm water improvements, pavement markings, and curb ramp and sidewalk accessibility improvements.
  - Road Rehabilitation: 4,668 ft.
  - Pavement Preservation: 18,502 ft.

### Accomplishments (cont.)

Sidewalks: 8,488 ft.Curb Ramps: 69

- Water Main Replacement: 4,997 ft.
- Sewer System: relining 6,599 ft., cleaning & inspection 3,602 ft.
- Provided assistance to Town Departments with technical input and site plan review for new and on-going projects, including Arlington High School, DPW Facility and Hurd Field Athletic Field Renovations. Additional support provided for Town Boards and Committees including site plan review for Comprehensive Permits at 1165R Mass Ave,1021-1025 Mass Ave., 34 Dudley Street and Colonial Village.
- Managed Street Opening Permit Program and monitored on-going utility construction projects by contractors and major utility providers in Town right of ways including Eversource, Verizon and National Grid. Oversight was performed in cooperation with the Water Division and Police Department. This included reviewing and administering work conditions and requirements including outreach, traffic management, trench repairs and annual trench inspection program.
- Permits issued in 2022: 600
- Planned, managed and coordinated maintenance and improvements through the Traffic Signal and Street Light Maintenance Contract, including:
  - Traffic Signal upgrades at Broadway & Cleveland and Mass Ave. & Brattle St.
  - Coordination of identified traffic signal and street light maintenance issues received via email, phone and WebQA.
  - Coordinated transfer requirements of street lights with Traffic Signal and Street Light Maintenance Contractor through National Joint Utilities Notification System (NJUNS) for Double Pole Management system, via email, phone and WebQA.
- Provided design, technical resources, project review and planning for the Water Distribution System including:
  - Assistance to Water Division including with DEP sanitary sewer survey, site plan reviews, capital water planning and collection and transfer of GIS data
  - On-going scanning and cataloging to digitize plans and records in electronic format, including upgrades, organization and increased usability of system in conjunction with GIS System.
- Coordinated planning and review of projects, reports and town regulations with the DPCD Environmental Planner for water quality and flood mitigation improvements in conjunction with requirements of the EPA Municipal Separate Storm Sewer System (MS4) Permit.



### Accomplishments (cont.)

- Assisted Engineering Consultant in preparing Annual MS4 Report and year 4 requirements including:
  - Town Phosphorus Control Plan
  - Stakeholder Outreach and Education
  - Improved Catch Basin cleaning program
  - Planning for Year 5 permit requirements.
- Managed and updated improvements to storm water infrastructure including planning, design and construction of 25 infiltration trenches. The 2022 Green Infrastructure Improvement Project was funded by a DEP Grant of \$148,500 and will remove contaminants from storm water runoff and improve water quality in the Mystic River in accordance with MS4 permit guidelines.

FY2020	FY2021	FY2022	FY2023
Actual	Actual	Actual	Estimated
27,705	23,682	23,170	21,000
8,625	6,815	8,488	7,000
5,910	1,400	3,138	2,000
	Actual 27,705 8,625	Actual         Actual           27,705         23,682           8,625         6,815	Actual         Actual         Actual           27,705         23,682         23,170           8,625         6,815         8,488



The Cemetery Division is responsible for the care and maintenance of the Mt. Pleasant Cemetery and the Old Burying Ground. The Mt. Pleasant Cemetery is an active cemetery comprising 62 acres of land and accommodates an average of 200 burials per year. The Old Burying Grounds is an inactive, historical community cemetery of six acres. Three volunteer Cemetery Commissioners make recommendations to the Town Manager on rules, regulations, and fees.

### **Budget Statement**

This is a level-services budget.

PROGRAM COSTS						
Cemetery	FY2021 Actual	FY2022 Actual	FY2023 Budget	FY2024 Reguest		
Personnel Services	179,645	182,506	280,775	290,032		
Expenses	126,642	150,252	192,500	222,500		
Total	306,287	332,758	473,275	512,532		

STAFFING					
	FY2021	FY2022	FY2023	FY2024	
Cemetery	Actual	Actual	Budget	Request	
Managerial	0	0	0	0	
Clerical	1	1	1	1	
Professional/Technical	0	0	0	0	
Public Works	3	3	3	3	
Total	4	4	4	4	

### **FY2024 Objectives**

- Commission a study to quantify available/remaining grave sites. This
  would include; buy backs, abandoned, and areas where sites can be
  added.
- Finalize survey and hydraulic model of Mill Brook throughout the cemetery. Data intended to be used for the application of possible grant funds to address Mill Brook Bridge crossing degradation and address bank erosion.
- Develop and construct landscaping improvements to columbarium space.

### **Major Accomplishments for 2022**

- Developed improvements for roadway edge erosion.
- Acquired State funding to study Mill Brook Hydraulics through the cemetery property
- Performed 152 earth burials and 115 cremains burials.

### Performance / Workload Indicators

Cemetery	FY2020 Actual	FY2021 Actual	FY2022 Actual	FY2023 Estimated
New Grave Sales	15	42	60	55
New Grave Sales	45	42	68	55
Funeral Excavations/Closures	227	244	267	250
Loam & Seed - Areas restored	295	253	329	275
Headstones Straightened	85	50	109	75
Restore/Place markers	101	82	53	80
Foundations Repaired/Constructed	33	20	14	25



The Natural Resources Division provides management, care, and maintenance of the Town's open space lands, public parks, playgrounds, and athletic fields. The primary facilities include nineteen (19) athletic fields, twenty-six (26) playgrounds, and parks including Reservoir Beach, North Union Spray Pool, Menotomy Rocks Park, McClennen Park, Town Hall Gardens, Minuteman Bike Path, Broadway Plaza, and the Whittemore-Robbins grounds. The division also maintains plantings and lawn care in twenty-one (21) traffic islands. The Tree Division is responsible for the management, care, and maintenance of more than 19,000 public trees.

### **Budget Statement**

This is a level-services budget.

PROGRAM COSTS					
	FY2021	FY2022	FY2023	FY2024	
Natural Resources	Actual	Actual	Budget	Request	
Personnel Services	938,400	961,347	1,239,048	1,245,531	
Expenses	429,376	586,242	549,000	549,000	
Maintenance Town Fiel	65,600	72,200	60,000	60,000	
Total	1,433,376	1,619,789	1,848,048	1,854,531	

STAFFING						
	FY2021	FY2022	FY2023	FY2024		
Natural Resources	Actual	Actual	Budget	Request		
Managerial	2	2	2	2		
Clerical	0	0	0	0		
Professional/Technical	0	0	0	0		
Public Works	16	16	16	16		
Total	18	18	18	18		

### **FY2024 Objectives**

- Evaluate options for invasive plant management.
- Incorporate recommendations from anticipated Public Land Management Plan.
- Investigate improvements for tree watering.

### **Major Accomplishments for 2022**

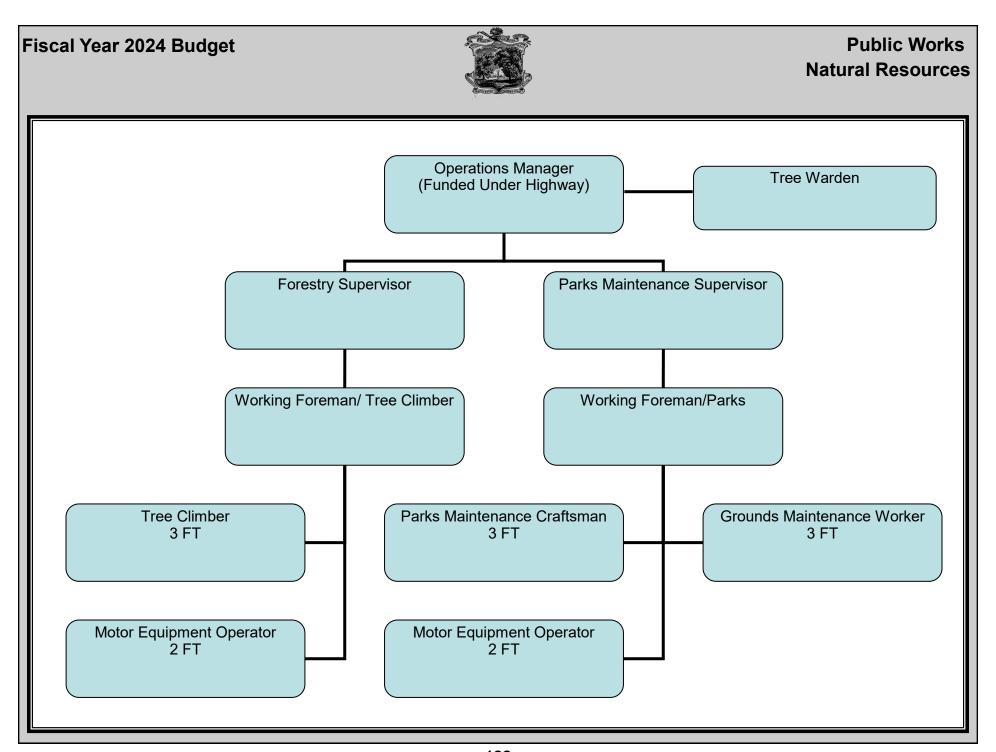
- Planted 373 trees. The number of planted trees exceeded the annual goal of 300 for a second year. This was done to make up for a shortfall in FY20 related to the COVID-19 Pandemic.
- Continued treatment of at-risk trees against Emerald Ash Borer insects. Treated 351 trees.
- Maintained "Tree City USA" designation from the National Arbor Day foundation. Arlington has been a "Tree City USA" community since 2001. Awarded a "Growth Award" (fourth year in a row) for additional work in protecting and providing for trees in Arlington.
- Maintained sidewalks adjacent to Town properties throughout the winter.

# Performance / Workload Indicators

Natural Resources	FY2020 Actual	FY2021 Actual	FY2022 Actual	FY2023 Estimated
Trees Planted	154*	424	373	325
Trees Removed	179	112	240**	200
Stumps Removed	215	159	192	200
8 Large Parks Maintained (acres)	66.3	66.3	66.3	66.3
(acres)	20.5	21.0	21	21
20 Landscaped Traffic Islands (acres)	1.8	1.8	1.8	1.8

<sup>\*</sup> Numbers down due to COVID-19

<sup>\*\*</sup>Town experienced a microbust





The Highway Division responsibilities include:

- Maintenance and repairs to Town streets and parking lots, including paved surfaces, curbs, sidewalks, shoulders, guard rails, bridges, stairs, and grass edges.
- Maintenance and installation of traffic lines, traffic and parking signs.
- Maintenance and repairs to Town drainage systems including pipes, culverts, catch basins, manholes, and waterways (both concrete and vegetated channels).
- Street sweeping services.
- Oversight of Solid Waste services including trash/recycling collections, bulky items collection /disposal, waste fill disposal, and hazardous waste programs.

### **Budget Statement**

This is a level-services budget.

PROGRAM COSTS				
	FY2021	FY2022	FY2023	FY2024
Highway	Actual	Actual	Budget	Request
Personnel Services	1,365,173	1,292,355	1,626,704	1,693,720
Expenses	474,079	418,710	653,000	653,000
Total	1,839,253	1,711,065	2,279,704	2,346,720

STAFFING				
	FY2021	FY2022	FY2023	FY2024
Highway	Actual	Actual	Budget	Request
Managerial	2	2	2	2
Clerical	0	0	0	0
Professional/Technical	0	0	0	0
Public Works	21	21	21	21
Total	23	23	23	23

### **FY2024 Objectives**

- Continued coordination with DPW Facility construction project to maintain high level of operations. Significant attention will be needed on snow/ice response and vehicle fueling operations during construction.
- Provide training for staff to calibrate rates of salt application for winter operations road treatment equipment.

### **Major Accomplishments for 2022**

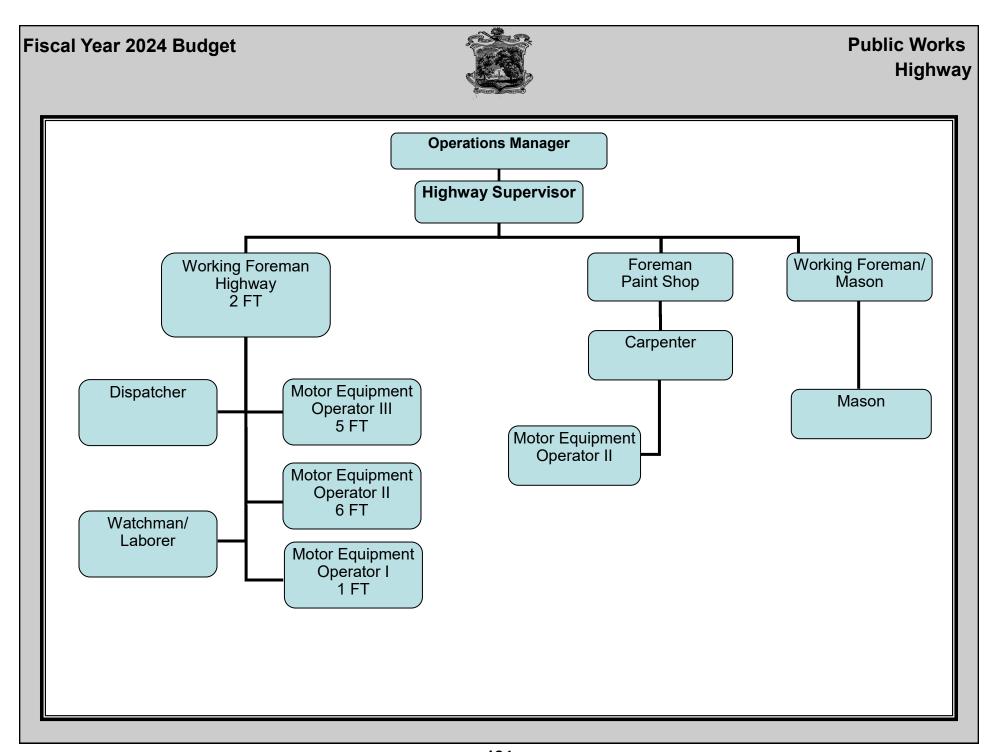
- Coordination and support of ongoing DPW facility project.
- Patched over 1,660 potholes.
- Cleaned approximately 3,019 catch basins (with the assistance of contracted help).
- Highway staff twice swept all the streets in Town with weekly sweeping of Business districts in season.
- Replaced over 5,775 feet of sidewalk (concrete and asphalt combined)
- Repaired/replaced 21 catch basins/manholes.
- Responded to 21 snow events totaling about 52 inches of accumulation.
- Placed 150 sand barrels Town wide for winter season for resident use.
- Delivered tax bills to post office for Treasurer's Office.
- Constructed eight parklets, increasing outdoor dining/seating for several Arlington businesses.

### Performance / Workload Indicators FY2020 FY2021 FY2022 FY2023 Highway Actual Actual Actual Estimated Patch Potholes in tons of asphalt 1,000 1,300 1,660 1,500 Sidewalk Patching 455 425 160 400 Repair Catch Basins / Manholes 35 38 21 30 Clean Catch Basins \*\*\* 3,810 3,207 3,019 3,500 1044 750 Install / Repair Street Signs 960 453 Make Specialty Signs 260 241 193 200 Pave Trenches 175 105 90 100 Sidewalk Replacements in linear feet 1,300\* 7,435 5,775 5,500 330 250 Curb Work in linear feet 380 210 35,406 34,068 35,000 Painted Traffic Lines - 24" in linear feet 34,114 Painted Traffic Lines - 12" in linear feet 4,560 4,447 3,972 4,000 134.390 116,291 115.000 Painted Traffic Lines - 4" in linear feet \* 2,840 Traffic Painted Symbols 139 98 115 120

\*\* Signifiaent amount of contracted work performed requred on peroiodic basis

\*\*\*Includes cleaning done by Contracted service

<sup>\*</sup>Quantity was down due to ongoing pandemic





The Snow and Ice Division is responsible for clearing snow and ice during and after winter storms.

### **Budget Statement**

The request for Snow and Ice Removal funds is level funded. Annual increases have been made in recent years to build the fund to match the five-year spending average.

PROGRAM COSTS				
Snow and Ice	FY2021	FY2022	FY2023	FY2024
Removal	Actual	Actual	Budget	Request
Snow and Ice				
Removal	1,220,622	1,178,036	1,172,013	1,172,013
Total	1,220,622	1,178,036	1,172,013	1,172,013

### **FY2024 Objectives**

- Investigate GPS tracking for snow and ice plows.
- Continue work on developing long term solution for permanent snow storage location.
- Maintain streets, sidewalks, parking areas and walkways for which the Town is responsible, during and after snow events.

### **Major Accomplishments for 2022**

- Managed snow operation from temporary facility set up during Town Yard project renovation
- Responded to 21 weather events totaling approximately 52 inches of accumulation.
- Significant response to increase in ice events.

Performance / Workload Indicators							
	FY2020	FY2021	FY2022	FY2023			
Snow and Ice	Actual	Actual	Actual	Estimated			
Plowing/Sanding Storms	5	8	5	7			
Sanding Only Storms	6	10	16	13			
Inches of Snow	24	50	52	22			



Oversees Solid Waste services, including trash/recycling collections, bulky items collection/disposal, yard waste, waste fill disposal, and hazardous waste programs.

### **Budget Statement**

This is a level-services budget.

PROGRAM COSTS				
	FY2021	FY2022	FY2023	FY2024
Solid Waste	Actual	Actual	Budget	Request
Solid Waste	3,579,235	3,631,965	4,272,212	4,394,973
Total	3,579,235	3,631,965	4,272,212	4,394,973

### **FY2024 Objectives**

- Establish year round medical sharps collection program at the Reuse
   & Recycling Center.
- Run a trial of expanded collection events to include paint and building materials.
- Undertake a local waste characterization study to investigate and report out about what is still in our trash and recycling that could be better sorted.
- Establish FixIt Clinics as a routine activity, hosting events three times a year.
- Continue to encourage the diversion of food scraps from the solid waste stream, expanding to multifamily dwellings.

### Major Accomplishments for 2022

- Signed solid waste and recycling contract with JRM/Republic Services, adding and additional collection truck for October and November yard waste collection and a second week of Christmas Tree collection.
- Adjusted bulky trash allowance to align with State waste ban laws by updating program rules and fees.
- Implemented a curbside textile collection program to assist residents to comply with recent State imposed textile waste ban.
- Implemented a curbside mattress recycling program to assist residents with recent State imposed mattress waste ban.
- Doubled the size of the popular Swap Shed project at the Reuse & Recycling Center.
- Expanded Reuse & Recycling Center weekday collections to include all materials that were originally only collected once a month at Ryder Street.
- Undertook new programs with Council on Aging to create secure document shredding and textile recycling campaigns.
- Held bike donation events in collaboration with Arlington Scouts program and The Bike Connector, collecting over 200 bikes during two events.
- Participated in the Minuteman Household Hazardous Waste collection event, offering eight annual opportunities for residents to divert toxic materials from the environment. A total of 487 vehicles from Arlington attended these events.

Performance / Workload Indicators				
	FY2020	FY2021	FY2022	FY2023
Solid Waste (tons)	Actual	Actual	Actual	Estimated
Solid Waste	12,225	12,433	12,217	12,500
Yard Waste	3,045	3,435	2,801	3,250
Recyclables	5,175	5,027	4,716	5,000



The Motor Equipment Repair (MER) Division maintains a fleet of over 150 Town vehicles. Tasks include preventative maintenance, breakdown repairs, and tire management.

### **Budget Statement**

This is a level-services budget.

PROGRAM COSTS				
Motor Equipment	FY2021	FY2022	FY2023	FY2024
Repair	Actual	Actual	Budget	Request
Personnel Services	400,933	355,625	465,635	479,086
Expenses	142,339	187,016	187,000	187,000
Total	543,272	542,641	652,635	666,086

### **FY2024 Objectives**

Complete move and set up of shops into new DPW Garage Facility.

### **Major Accomplishments for 2022**

- Acquired new Department vehicles; (2) 33,000gvw dump truck w/plow, 1 ton pickup dump body with plow, large deck mower, and enclosed equipment trailer.
- Decommissioned older diesel vehicles replaced with new equipment funded through State grant funding. Grant amount awarded over \$275,000 applied to the purchase of four vehicles.
- Provided preventative maintenance and repairs on 150 motor vehicles.
- Maintained snow and ice vehicles during snow events.

STAFFING				
Motor Equipment	FY2021	FY2022	FY2023	FY2024
Repair	Actual	Actual	Budget	Request
Managerial	1	1	1	1
Clerical	0	0	0	0
Professional/Technical	0	0	0	0
Public Works	5	5	5	5
Total	6	6	6	6



The Administration Division oversees the contracted maintenance of the Town streetlights. In 2006, the Town purchased the streetlights from Eversource and has since realized considerable savings by contracting out maintenance work. This budget also covers the costs of electrical power usage and the contracted maintenance of traffic signal systems, which is overseen by the Engineering Division.

### Major Accomplishments for 2022

- Traffic Signal upgrades at Broadway & Cleveland and Mass Ave. & Brattle St.
- Completed second year of painting upgrades at numerous traffic signal locations.

### **Budget Statement**

This is a level-services budget.

PROGRAM COSTS				
Street Lights/ Traffic Controls	FY2021	FY2022	FY2023	FY2024
	Actual	Actual	Budget	Request
Personnel Services	-	-	-	-
Expenses	216,834	241,267	230,000	250,000
Total	216,834	241,267	230,000	250,000

### **FY2024 Objectives**

- Update and improve lighting at Municipal Parking lots.
- Continued program of updating older, problematic traffic signal control equipment.



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